BRUHAT BANGALORE MAHANAGARA PALIKE

MEASUREMENT SHEET

RA 1ST AND FINAL BILL

Name of work: Improvements to Roads, Drains and other Works at Mariyamma Block in Ward No. 11, Kuvempunagara.

Estimated Cost : Rs. 28.00 Lakhs

Head of Account : P-1878

Job Number 011-18-000028

Name of Agency: Executive Engineer, KRIDL

Work order No: BBMP/EE/BTP/32/2018-19 Dated: 13.07.2018

Measurements Recarded on : 28/01/2020

Sl No	Description of item	No	L	B1	B2	Av. B	D	Qty	Unit / Rate	Amount
1	KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork **excavation by manual means in ordinary** soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications.								Cum	
	Qty as per Premeasurement Recorded vide E-Bill Page No. 1 & 2 is							**81.78**	199.36	**16304.00**
2	Removing and refixing stone slabs of drains and pointing in CM (1:3)								Sqm	
	Qty as per Premeasurement Recorded vide E-Bill Page No. 3 is							**583.20**	80.56	**46983.00**
3	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete								Sqm	
	Mariyamma Block Main Road N/S	1	18.00				1.35	24.30		
		1	21.00				1.35	28.35		
		1	15.00				1.35	20.25		
		1	10.00				1.35	13.50		
		1	2.00				1.35	2.70		
		1	2.50				1.35	3.38		
		1	19.20				1.35	25.92		
	Mariyamma Block Main Road S/S	1	11.70				1.35	15.80		
		1	1.20				1.35	1.62		
		1	0.60				1.35	0.81		
		1	5.40				1.35	7.29		
		1	1.80				1.35	2.43		
		1	1.20				1.35	1.62		
		1	6.00				1.35	8.10		
	1st Cross R/S	1	20.00				1.35	27.00		
		1	15.00				1.35	20.25		
		1	12.00				1.35	16.20		
		1	10.00				1.35	13.50		
		1	8.00				1.35	10.80		
	1st Cross L/S	1	15.00				1.35	20.25		
		1	12.00				1.35	16.20		
		1	28.00				1.35	37.80		
		1	30.00				1.35	40.50		
		1	20.00				1.35	27.00		

385.57

Assistant Engineer

385.57

Assistant Executive Engineer

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Vidyaranyapura Sub Division
BBMP, Bangalore - 97

Sl No	Description of item	No	L	B1	B2	Av. B	D	Qty	Unit / Rate	Amount
		1	10.00				1.35	13.50		
		1	8.00				1.35	10.80		
								409.86		
								408.24	665.68	**271757.00**
4	Providing and **Filling in foundation with granite / trap broken metal** 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications.								Cum	
	Qty as per Premeasurement Recorded vide E-Bill Page No. 4 is							**58.32**	2240.84	**130686.00**
5	Construction of granular sub-base by providing close graded crushed stone aggregates of granite / trap / basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method. - For Grading II								Cum	
	Qty as per Premeasurement Recorded vide E-Bill Page No. 5 is							**23.46**	1665.26	**39067.00**
6	Providing and laying in position **plain cement concrete of mix 1:4:8** with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, **in foundation**, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.								Cum	
	Qty as per Premeasurement Recorded vide E-Bill Page No. 6 is							**78.14**	5157.02	**402970.00**
7	Providing and constructing load bearing wall with solid concrete blocks of size **400x200x200 mm** having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 4.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications.								Sqm	
	Raising of BS Slab Drain									
	Mariyamma Block Main Road N/S	2	30.00				0.60	36.00		
		2	30.00				0.60	36.00		
		2	15.00				0.60	18.00		
		2	10.00				0.60	12.00		
		2	2.00				0.60	2.40		
		2	2.50				0.60	3.00		
		2	19.20				0.60	23.04		
	Mariyamma Block Main Road S/S	2	11.70				0.60	14.04		
		2	1.20				0.60	1.44		
		2	0.60				0.60	0.72		
		2	5.40				0.60	6.48		
		2	1.80				0.60	2.16		
		2	1.20				0.60	1.44		
		2	6.00				0.60	7.20		
	1st Cross R/S	2	30.00				0.60	36.00		
		2	30.00				0.60	36.00		
		2	30.00				0.60	36.00		
		2	30.00				0.60	36.00		
		2	30.00				0.60	36.00		
		2	6.00				0.60	7.20		
	1st Cross L/S	2	30.00				0.60	36.00		
		2	30.00				0.60	36.00		

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Sl No	Description of item	No	L	B1	B2	Av. B	D	Qty	Unit / Rate	Amount
		2	30.00				0.60	36.00		
		2	30.00				0.60	36.00		
		2	20.00				0.60	24.00	96	
								519.12		
								518.40	993.22	**514885.00**
8	Providing and laying in position **plain cement concrete of mix 1:2:4** with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, **in foundation, plinth and cills**, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications.								Cum	
	Bed Concrete									
	Mariyamma Block Main Road N/S	1	30.00				0.45	0.10	1.35	
		1	30.00				0.45	0.10	1.35	
		1	15.00				0.45	0.10	0.68	
		1	10.00				0.45	0.10	0.45	
		1	2.00				0.45	0.10	0.09	
		1	2.50				0.45	0.10	0.11	
		1	19.20				0.45	0.10	0.86	
	Mariyamma Block Main Road S/S	1	11.70				0.45	0.10	0.53	
		1	1.20				0.45	0.10	0.05	
		1	0.60				0.45	0.10	0.03	
		1	5.40				0.45	0.10	0.24	
		1	1.80				0.45	0.10	0.08	
		1	1.20				0.45	0.10	0.05	
		1	6.00				0.45	0.10	0.27	
	1st Cross R/S	1	30.00				0.45	0.10	1.35	
		1	30.00				0.45	0.10	1.35	
		1	30.00				0.45	0.10	1.35	
		1	30.00				0.45	0.10	1.35	
		1	30.00				0.45	0.10	1.35	
		1	6.00				0.45	0.10	0.27	
	1st Cross L/S	1	30.00				0.45	0.10	1.35	
		1	30.00				0.45	0.10	1.35	
		1	30.00				0.45	0.10	1.35	
		1	30.00				0.45	0.10	1.35	
		1	20.00				0.45	0.10	0.90	
	Coping Concrete									
	Mariyamma Block Main Road N/S	2	30.00				0.20	0.10	1.20	
		2	30.00				0.20	0.10	1.20	
		2	15.00				0.20	0.10	0.60	
		2	10.00				0.20	0.10	0.40	
		2	2.00				0.20	0.10	0.08	
		2	2.50				0.20	0.10	0.10	
		2	19.20				0.20	0.10	0.77	
	Mariyamma Block Main Road S/S	2	11.70				0.20	0.10	0.47	
		2	1.20				0.20	0.10	0.05	
		2	0.60				0.20	0.10	0.02	
		2	5.40				0.20	0.10	0.22	
		2	1.80				0.20	0.10	0.07	
		2	1.20				0.20	0.10	0.05	

Assistant Engineer

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Sl No	Description of item	No	L	B1	B2	Av. B	D	Qty	Unit / Rate	Amount
		2	6.00			0.20	0.10	0.24		
	1st Cross R/S	2	30.00			0.20	0.10	1.20		
		2	30.00			0.20	0.10	1.20		
		2	30.00			0.20	0.10	1.20		
		2	30.00			0.20	0.10	1.20		
		2	30.00			0.20	0.10	1.20		
		2	6.00			0.20	0.10	0.24		
	1st Cross L/S	2	30.00			0.20	0.10	1.20		
		2	30.00			0.20	0.10	1.20		
		2	30.00			0.20	0.10	1.20		
		2	30.00			0.20	0.10	1.20		
		2	20.00			0.20	0.10	0.80		
								36.77		
								36.72	5767.46	**211781.00**
9	Providing **precast slab of 100 mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc., complete as per the direction of engineer in charge-Data rate								Sqm	
	RCC Drain Slab									
	Mariyamma Block Main Road N/S	1	30.00			0.90		27.00		
		1	30.00			0.90		27.00		
		1	15.00			0.90		13.50		
		1	10.00			0.90		9.00		
		1	2.00			0.90		1.80		
		1	2.50			0.90		2.25		
		1	19.20			0.90		17.28		
	Mariyamma Block Main Road S/S	1	11.70			0.90		10.53		
		1	1.20			0.90		1.08		
		1	0.60			0.90		0.54		
		1	5.40			0.90		4.86		
		1	1.80			0.90		1.62		
		1	1.20			0.90		1.08		
		1	6.00			0.90		5.40		
	1st Cross R/S	1	30.00			0.90		27.00		
		1	30.00			0.90		27.00		
		1	30.00			0.90		27.00		
		1	30.00			0.90		27.00		
		1	30.00			0.90		27.00		
		1	6.00			0.90		5.40		
	1st Cross L/S	1	30.00			0.90		27.00		
		1	30.00			0.90		27.00		
		1	30.00			0.90		27.00		
		1	30.00			0.90		27.00		
		1	20.00			0.90		18.00		
								389.34		
								388.80	1820.56	**707834.00**

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Vidyaranyapura Sub Division
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Sl No	Description of item	No	L	B1	B2	Av. B	D	Qty	Unit / Rate	Amount
	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum)								Cum	
	Varadrajangara Masidi	1	21.50	6.60	4.50	5.55	0.15	17.90		
		1	31.50	2.50	4.10	3.30	0.15	15.59		
								33.49		
								32.71	5508.82	**180194.00**
	Sub Total									**2522461.00**
	KRIDL Charges @ 10%									**252246.00**
	Labour Cess Charges @ 1%									**25225.00**
									Total	**2799932.00**

28/01/2020

Assistant Engineer
Ward No. 11

Assistant Executive Engineer
Vidyaranyapura Sub Division

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BBMP, Bangalore - 97